ABSTRACT

A method of manufacturing a measuring wheel for wireline operations includes the step of machining a metal wheel to achieve a first outer radius. The metal wheel is positioned within a ceramic ring having an inner radius that exceeds the first outer radius by an amount in the range of 0.005 to 0.010 inches, defining a gap between the ceramic ring and the metal wheel. The gap is substantially filled with a suitable epoxy, and the epoxy is cured to adjoin the ceramic ring to the metal wheel. The perimeter of the ceramic ring is machined to achieve a second outer radius and a desirable surface finish and pattern.